

WHAT IS CLAIMED IS:

1. An ink-jet recording apparatus comprising a low-penetrable ink which tends to accumulate an ink component on an ink-absorbing member, and a high-penetrable ink which less tends to accumulate an ink component on the ink-absorbing member, wherein the ink-jet recording apparatus is so controlled, as to use only the high-penetrable ink when an image is formed even in a peripheral area of a recording medium including the edge thereof.

2. The ink-jet recording apparatus according to claim 1, wherein the low-penetrable ink is a pigment ink, and the high-penetrable ink is a dye ink.

3. An ink-jet recording apparatus comprising a low-penetrable ink which tends to accumulate an ink component on an ink-absorbing member, and a high-penetrable ink which less tends to accumulate an ink component on the ink-absorbing member, wherein the ink-jet recording apparatus is so controlled as to gradually decrease the amount of the low-penetrable ink to be applied and as to gradually increase the amount of the high-penetrable ink to be applied toward the edge of a recording medium when forming an image even in a peripheral area of a recording medium including the edge thereof.

4. The ink-jet recording apparatus according to claim 3, wherein the low-penetrable ink is a pigment ink, and the high-penetrable ink is a dye ink.

5 5. An ink-jet recording process comprising at least one of the steps of: (i) applying a low-penetrable ink which tends to accumulate an ink component on an ink-absorbing member; and (ii) applying a high-penetrable ink which less tends to accumulate an ink component on the ink-absorbing member, wherein an image is formed by controlling the process so as to use only the step (i) when forming an image even in a peripheral area of a recording medium including the edge thereof.

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6. An ink-jet recording process comprising at least one of the steps of: (i) applying a low-penetrable ink which tends to accumulate an ink component on an ink-absorbing member; and (ii) applying a high-penetrable ink which less tends to accumulate an ink component on the ink-absorbing member, wherein an image is formed by controlling the step (i) so as to gradually decrease the amount of the low-penetrable ink to be applied and by controlling the step (ii) so as to gradually increase the amount of the high-penetrable ink to be applied toward the edge of a recording medium when forming the image even in a peripheral area of a

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recording medium including the edge thereof.

7. An ink-jet recording apparatus for printing
on a recording medium with an ink, or a reaction
5 product of the ink and a liquid composition that reacts
with the ink when coming into contact with the ink,
comprising an ink, a liquid composition, an ink-jet
head for ejecting the ink, and a means for applying the
liquid composition onto the recording medium, wherein
10 the apparatus further comprises a control means for
printing only with the ink when forming an image on a
peripheral area of the recording medium including the
edge thereof.

15 8. A process for forming an image on a recording
medium with a reaction product of an ink and a liquid
composition capable of reacting with the ink when
coming into contact with the ink, comprising the steps
of:

20 (i) applying the ink to the recording medium, and
(ii) applying the liquid composition to the recording
medium,
the step (ii) being conducted so as to form at least
the reaction product of the ink and the liquid
25 composition on the recording medium,
wherein the process further comprises a controlling
step to conduct printing by employing only the step (i)

when forming the image even on a peripheral area of the recording medium including the edge thereof.

9. A process for forming an image on a recording medium with a reaction product of an ink and a liquid composition that reacts with the ink when coming into contact with the ink, comprising steps of:

(i) applying the ink to the recording medium, and

(ii) applying a prescribed amount of the liquid composition to the recording medium,

the step (ii) being conducted so as to form at least the reaction product of the ink and the liquid composition on the recording medium,

wherein the process further comprises a controlling step to apply the liquid composition to a peripheral area of the recording medium including the edge thereof in step (ii) in an amount smaller than the prescribed amount when forming the image even on the peripheral area.

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10. The process for forming an image on a recording medium according to claim 9, wherein said controlling step controls the applied amount of the liquid composition in the peripheral area so as to decrease toward the edge of the recording medium.

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